

The Builder.

No. CCCCXX.

SATURDAY, FEBRUARY 22, 1851.



HE responsibility of those who design without knowledge, and build without care, has been made obvious in Ireland, to those who needed practical illustration, by the verdict of the coroner's jury, touching the death of sixteen individuals, unfortunately caused by the fall of a mill at Beers' Bridge, Belfast, on the 10th of January last, and briefly mentioned in our columns at the time. The interior of the mill, to make it fire-proof, was formed by iron columns and brick arches,—a dangerous mode of construction in ignorant hands,—and was on the point of being alated, when it fell. It was about 84 feet long, 47 feet wide, and 42 feet high. The roof was in one span, and each rafter about 27 feet long. There were three stories and an attic. The walls were 2 feet thick at bottom, and 1 foot 3 inches in the upper floor.

The cause of the failure occupied the jury from the 11th of January, by adjournment, up to Saturday, the 8th of February, during which time a great number of professional and other witnesses were examined. It appeared that a mechanical engineer, not practically acquainted with building, had been consulted with regard to how far an old mill, formerly in use for the scutching of flax, could be most economically converted into a fire-proof mill for preparing flax for spinning by machinery. And with him it was arranged to take down the old walls to within about 3 feet from the ground, and to commence the new structure upon the old foundations. Down the centre nearly of the building was to be a row of nine cast-iron columns, 8 inches in diameter, and 11 feet 8 inches long, for which new foundations had to be built. The side wall was to have been 36 feet high; but after the plan had been drawn, it was resolved to put an additional floor, making three stories and the attic. It was alleged to the contractor, that this augmentation would only add 3 feet to the height of the building; but it turned out that it added at least 5 feet. It was stated, that the practical engineer had sanctioned this increase of height and weight on the building, without making any inspection to enable him to judge of the character of either work or materials; both of which, it was asserted, were bad. There was a mixture of new and old bricks; and many of the latter were thicker than the new, and in the proportion of about three to one, or at least two to one; a large number of them being moreover bats.

The iron columns were placed 22 feet from one side wall, and 22 feet 10 inches from the other, and supported iron girders meeting on the columns, with collar flanges secured by screws and nuts, and projecting snugs, upon which malleable bands, or rings, were to be introduced hot. From girder to girder brick arches were thrown, resting the skew-back on the flange on the bottom of the girder. On the wall ends of the upper, or third girder, there were attached vertical cast-

ings, having a shoe on the top to receive the end of the timber principal. There was a collar brace dovetailed on these at about 7 feet from the top, opposite to which the upper purlin was fixed, at about 9 feet 6 inches from the ridge, on the back of the principal.

After the building had progressed, so as to have the roof nearly alated, an excavation was made for a sewer, along the sides of the rubble masonry: the centre of this was 6 feet from the centre of the columns at the south end, and 3 feet 6 inches at the north.

One of the witnesses examined thought the mill fell through the dampness of the atmosphere acting on the mortar, it not being made of hydraulic lime; a second, because of the unequal sizes of the bricks; and a third, Mr. McHenry, an architect, through the bad foundation under the columns, and the weakness caused by the excavation just mentioned. Some said the work was hurried (it occupied from Oct. 1 to Jan. 10) and negligently done; others that it was sufficient.

One of the opposing solicitors, to show the responsibility of the owner of the mill (Mr. Boyd), quoted a *visi prius* case of a man who had employed an architect to build a house. The architect employed a carpenter to do the work. The latter employed a bricklayer, who again employed a lime-burner to supply him with lime. The lime was so improperly placed on the road, that a carriage, with a lady and gentleman, passing by, the horse was tripped up and fell, and the lady and gentleman were flung out. An action was brought against the owner of the house, and damages given by the jury.

Mr. Garrett, solicitor for Mr. Boyd, after contending that there had been no neglect, that full time had been allowed for the work, that the materials were sufficient, that the bricklayer employed (Magee) was competent, and that, even supposing there had been neglect on the part of Magee, there was no testimony to show that Mr. Boyd was criminally responsible,—said, that as to the appointment of an architect, or clerk of works, it was not necessary to tell the jury that it was quite unusual, in Belfast, to employ either one or other; and respectable witnesses had shown them that the workmen might "scamp" their work, even with a clerk over them. One had told them that he always recommended the employment of an architect, when giving plans for a fire-proof building, not because he had apprehended loss of life, but merely that it enabled him to fit up the machinery more easily. And that gentleman had even stated, that he had himself built two mills without the aid of any architect. The jury knew that such was the general practice. And he scouted the notion that any charge of criminal neglect, amounting to manslaughter, could be brought against his client.

Mr. Rea, on the part of the relatives of the deceased, and in support of charges against Mr. Boyd and Mr. Magee, as owner and contractor, said,—In *The King v. Nancy Simpson*, reported in "Wilcock on the Law relating to the Medical Profession," Justice Bailey said he took it to be quite clear, that, "if a person not of medical education, is a case where professional aid might be procured, undertook to administer medicine which might have an injurious effect, and thereby occasion death, such person was guilty of manslaughter. He may have no evil intention,

and may have a good one, but he has no right to hazard consequences. If he do so, it is at his own peril; and, whether he prepared the medicine himself, or got it from another, the prisoner should be convicted." That was a case ruled by Mr. Justice Bailey: and, six months hence, might they not, be asked, see in the Irish law reports, the case of *The Queen v. Robert Boyd and John Magee*, in which it would be ruled by Mr. Justice Perrin, at the Downpatrick Assizes, on the same principle as in the case he had just quoted, that, "if a person not of architectural education, in a case where the service of architects could be procured, undertook to erect a huge edifice, such as a fire-proof mill, composed of ponderous materials, which may fall, and that the building does fall, and thereby causes death, such person is guilty of manslaughter. He may have no evil intention, and may have a good one, but he has no right to hazard the consequences in a case where architectural assistance may be obtained. If he do so, it is at his own peril, and the prisoner must be convicted." He maintained that, if ever there were a proper case cited by lawyer in a court of justice, this was a case in point. Mr. McHenry had said that if the mill were standing at the present moment, no human being could tell at what moment it would fall to the ground; and that it was only by the mercy of Providence that five hundred individuals, instead of sixteen, had not lost their lives. Was a course which might entail such a result as that to be permitted with impunity?

The coroner having summed up, the jury were closeted for five hours, and then gave the following verdict as the opinion of the majority:—

"We find that James Greer, &c., &c., came by their deaths in consequence of a newly-built mill, at Beers'-bridge, having fallen on them, whilst they were working therein, on the morning of the 10th of January, 1851, and we are of opinion that the falling of the said mill was caused by its having been hastily and improperly built, both with regard to the material used, and the manner of its erection; and we are of opinion that Robert Boyd and John Magee are wilfully and feloniously guilty of the improper construction and erection of the said mill."

The solicitor of Mr. Boyd entered a caveat against the verdict, denying that the "improper construction and erection of a mill could be considered a criminal offence," and warning the coroner not to issue a warrant on the inquisition.

We give publicity to these proceedings with the earnest hope that some, in England as well as Ireland, may thereby be led to reflect on the possible consequences of their own acts. We express no opinion as to the insufficiency or otherwise of the work done at the mill in question: the point to be condemned here is the non-employment of a properly qualified architect. On all sides of us, however, houses are being carried up in the most insufficient manner,—on a bad system, with bad materials, and worse workmanship. The wonder is that they can be kept up: both theory and practice would say they must fall;

* Ten of the jurors handed the coroner the following:—"We find that James Greer, &c., came by their deaths in consequence of a newly-built mill, at Beers'-bridge, having fallen on them, whilst they were working therein, on the morning of the 10th of January, 1851, and although we consider the falling of the said mill an accidental circumstance, we cannot avoid recording our opinion that industrial care was not taken in its erection, although we do not consider that that neglect amounts to criminality."